

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings of claims in the application:

Claim 1 (currently amended): A method of manufacturing a planar light-wave circuit for manipulating an optical signal, the method comprising:

forming a mask of optical waveguides defining at least one optical waveguide pattern on a core material, the core material being on a bottom cladding; and

forming a mask of load structures defining at least one etch load pattern on the core material ~~until such that~~ a total surface area of both the optical waveguide mask and the load structure mask cover at least approximately 25% of a surface area of the core material.

Claim 2 (original): The method of claim 1, wherein the mask of optical waveguides and the mask of load structures are formed simultaneously.

Claim 3 (original): The method of claim 1, further comprising etching the core material not masked by the optical waveguide mask and load structure mask.

Claim 4 (currently amended): The method of claim 1, wherein the mask of optical waveguides is separated from the mask of load structures ~~mask~~ by at least 50 µm.

Claim 5 (currently amended): The method of claim 1, further comprising depositing a top cladding on the core material after etching.

Claim 6 (original): The method of claim 1, wherein the load structure mask forms the etch load pattern having at least two load structures which intersect one another.

Claim 7 (original): The method of claim 1, wherein the pattern of load structures has a profile similar to a profile of the pattern of optical waveguides.

Claim 8 (withdrawn): A planar light-wave circuit having at least one optical waveguide pattern and at least one etch load pattern and being made in accordance with the process of any of claims 1-7.

Claim 9 (withdrawn): The planar light-wave circuit of claim 8 wherein the etch load pattern is distributed over a surface of the PLC.

Claim 10 (withdrawn): A wafer having at least one planar light-wave circuit pattern comprising:

a cladding layer having a cladding surface area;
at least one planar light-wave circuit pattern comprising each a plurality of optical waveguides;
a total surface area of said planar light-wave circuit patterns an optical waveguide coverage area;
a plurality of load structures on said cladding layer and forming a pattern of etch loading, wherein each of said load structures is separated from each said optical waveguide by at least a proximity correction distance;
a total surface area of said pattern of etch loading defining an etch load coverage area; and
wherein the sum of said optical waveguide coverage area and said etch load coverage area are at least approximately 25% of said substrate surface area.